

What is claimed is:

- 1 1. A data processing method with a state-restoring function, said method suits a
2 data-processing device having a spare power source; wherein said data-processing
3 device is mounted with a store device; when said data-processing device is in a state
4 of shutdown, it is in an initial state; said method comprises following steps:
5 1) an electric-power restoring step of a main power source, said step further includes
6 steps below:
 - 7 a. said data-processing device discriminates whether power supplying of said
8 main power source is in a normal state; if yes, a following step (step b.) is executed,
9 if no, said data-processing device is in said initial state;
 - 10 b. said data-processing device discriminates whether said store device is stored
11 therein environmental parameters by executing a Basic Input Output System; if yes,
12 said method skips directly to executing of a following step (step d.), if no, a
13 following step (step c.) is executed;
 - 14 c. this step activates an operating system, and then skips to a following step
15 (step e.);
- 16 2) a step of monitoring and controlling said main power source, said step further
17 includes steps below:
 - 18 d. said environmental parameters of said store device are stored in said
19 data-processing device, in order that said data-processing device restores said
20 operation environment of said operating system before said main power source is
21 interrupted;
 - 22 e. said data-processing device executes said operating system;
 - 23 f. when said main power source is interrupted, said spare power source is
24 immediately used, then said data-processing device executes a waiting step, if said

25 main power source has not yet been resumed at the end of said waiting step, said
26 method skips to a following step (step g.), if said main power source is resumed
27 during executing said waiting step, said step (e.) is executed;

28 g. said environmental parameters in said operation environment of said
29 operating system at present of said data-processing device are stored in said store
30 device; and

31 h. said data-processing device is rebooted to execute an electric-power restoring
32 step of said main power source.

1 2. The method as in claim 1, wherein said data-processing device is a server.

1 3. The method as in claim 1, wherein said data-processing device is a personal
2 computer.

1 4. The method as in claim 1, wherein said waiting step leaves said data-processing
2 device idle to wait a period of time.

1 5. The method as in claim 4, wherein setting of said waiting time is decided according
2 to capacity of said spare power source.

1 6. The method as in claim 1, wherein said store device is a hard disk.

1 7. A data-processing device with a state-restoring function, said data-processing
2 device comprises:

3 a spare power supply for said data-processing device used in case a main power
4 source is interrupted;

5 a store device to store environmental parameters;

6 first program codes to monitor and control interruption of said main power
7 source, said first codes are used to store said environmental parameters in an
8 operation environment of an operating system at present during execution of said
9 data-processing device when said main power source is interrupted, and to reboot

10 said data-processing device;
11 second program codes for discriminating whether said main power source is
12 normally to supply electric power, said second codes are used to store said
13 environmental parameters of said store device in said data-processing device when
14 said main power source is resumed to supply electric power and said data-processing
15 device reboots, in order that said data-processing device restores an operation
16 environment of an operating system before said main power source is interrupted.

1 8. The data-processing device as in claim 7, wherein said data-processing device is a
2 server.

1 9. The data-processing device as in claim 7, wherein said data-processing device is a
2 personal computer.

1 10. The data-processing device as in claim 7, wherein said data-processing device
2 further comprises third program codes used to leave said data-processing device idle
3 to wait a period of time.

1 11. The data-processing device as in claim 10, wherein setting of said waiting time is
2 decided according to capacity of said spare power source.

1 12. The data-processing device as in claim 7, wherein said store device is a hard disk.